

Entering Farmville: Finding Value in Social Games

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Abstract

Social games – games that operate within social network sites (SNS) and draw on a user's social graph – are a rapidly growing phenomena. According to AppData's facebook applications report, Zynga's social game, Farmville, had 29,100,000 monthly active users (MAU) and 5,800,000 daily active users (DAU) as at the 15th March 2012. The site also lists Farmville as No.7 on the App leaderboard, and Zynga, the game designer, as no. 1 on the developer leaderboard with 245,429,908 MAUs. These are not small numbers and clearly indicate a level of engagement and correspondingly, of revenue generation that warrant closer examination. However, the value of social gaming is far from just economic, with the experiences of game-play, and the broader social interactions possible surrounding social games, potentially creating value for the game company and players themselves in a number of different ways. This paper will explore the experience of the Zynga game Farmville, with particular focus on the question of value. Primary evidence will be drawn from the ethnographic experiences of one of the authors who spent several months immersed in Farmville as an explicitly positioned ethnographic researcher (as part of a larger ARC Linkage grant on social gaming on the internet). In order to situate these findings, this paper will also provide a brief history of the games leading to Farmville and explore the broader context of value creation in social games.

While games played on mobile phones or on social networks such as Facebook may ostensibly appear trivial and thus easily marginalised and dismissed, they have proven incredibly popular with hundreds of millions of users, and have generated significant commitment in terms of time, emotion, and, at times, money. The term 'social game' is contested; the two main uses being either a game involving multiple players interacting socially or, more recently, games specifically played within online social networking platforms (Jacobs and Sihvonen, 2011). In the world of online social games, Zynga is the most successful company by a significant margin, cleverly deploying game after game in the social game space and enjoying both prominence and a special relationship with Facebook who are the exclusive provider and portal for Zynga's games. Indeed, when Facebook revealed details of their financial operations in preparation for their initial public offering (IPO) on the stock market, the documentation revealed that money generated by and through Zynga's games account for 12 per cent of Facebook's entire revenue (Geron, 2012). Purely in economic terms, then, Mafiawars, Cityville, Frontierville and Zynga's most well-known offering, Farmville, are amongst the financial jewels in the crown of the world's largest social networking company. However, the value of games, and social gaming in particular, is far from just economic, with the experiences of gameplay, and the broader social interactions possible surrounding social games, potentially creating value for the game company and players

themselves in a number of different ways. This paper will explore the experience of the Zynga game Farmville, with particular focus on the question of value. Primary evidence will be drawn from the ethnographic experiences of one of the authors, Mark Balnaves, who spent several months immersed in Farmville as an explicitly positioned ethnographic researcher (as part of a larger ARC Linkage grant on social gaming on the internet). In order to situate these findings, this paper will also provide a brief history of the games leading to Farmville and explore the broader context of value creation in social games.

Virtual Currencies

While virtual goods and virtual economies have been around as part of online video games and virtual worlds, such as Second Life, for more than fifteen years (Castronova, 2003), the integration of virtual goods into social games, and the ease of purchasing within these systems, makes virtual goods a particularly attractive revenue source for game designers working within social network platforms. Indeed, the ease with which virtual goods can be purchased to circumvent the repetitive demands of gameplay within Farmville have attracted considerable criticism, including the argument that social games are neither social – in that they do not foster meaningful social engagement, only relationships of convenience to further game goals – nor are they actually games, but rather cynical rule-based systems for draining time and, where possible, money, from players (Bogost, 2010; Rossi, 2009).

With that criticism in mind, it is nevertheless noteworthy that globally, virtual goods were worth around \$US7 billion in 2010, and over 60 percent of the revenue came from social games like Farmville (Greengard, 2011). Zynga are far from the only company running social games that involve virtual goods and the potential to purchase these goods for real money (Lim and Seng, 2011). While Zynga's virtual goods cannot be explicitly exchanged back for 'real' money, the company's Sweet Seeds charity promotion allowed the proceeds from certain in-game purchases to go directly to specific charities raising, for example over \$US1 million for Haitian children (Greengard, 2011). In general, though, spending money in Zynga games is a one-way street, and the purchasing of virtual goods is the main revenue raiser for the company.

User motivations and 'value'

According to Demetrovics et al (2011: 823), online gaming user motivations – the motivations for why users participate in particular online games – can be characterised as falling within or across seven categories: escape, coping, fantasy, skill development, recreation, competition and social. Social games offer the potential for users realising all or any of these motivational categories but in a way that also allows for short-time engagement episodes (so participation is not time costly for the user in the way that, for example, MMORPGs—massively multiple online role playing games—can be), and the possession of minimal skill levels: thus offering maximum accessibility in a non-threatening environment with 'real' friends. Game designers recognise these motivations and build them (often rather simplistically) into their game mechanisms. Unsurprisingly, Brian Reynolds (2009), Zynga's chief game designer notes that the three pillars of their game development are:

- Play: light interactions with social graph via game;
- Invest: put time into a game to progress and customise;
- Express: it's fun and efficiently generates social capital.

These pillars articulate clearly the recognition that targeted users want 'light interaction' but also frame an understanding of social interaction in an instrumental and mechanistic manner. This reinforces the critique that has been targeted at social games—that users and their social graph are viewed as resources and potentially accessed in instrumental ways in order to 'efficiently generate' social capital (Rossi, 2009).

Mechanisms of character customisation, virtual currency exchange, reputation building acts, and social capital building through exchange and shared experiences all encourage users to engage with the game, with other users (usually their friends) and to encourage user engagement longevity. Quests or challenges, the need for continual maintenance or upkeep of individual 'sites' such as farms as well as in-built social exchange tasks also require the user to contribute a certain degree of regular time to the game. As Whitson and Dormann (2011) note,

In terms of time commitment, there is nothing 'casual' about playing Facebook games. While a single play session may last 10 minutes, the structure of Facebook games encourage players to continually check back into the game as there is always something new to do.

While undertaking their case study research into the Facebook game, Frontierville, they found that, 'Generally, play averaged about an hour and a half each day'.

LTV or lifetime value is a term used to refer to a measure of the amount of money a user will spend over the length of the game. LTV is of critical importance to the economic viability of any of these social games. Zynga calculate that the amount of time needed for an effective LTV to be achieved is roughly 80-150 hours. This level of user engagement is needed in order to maximise micro-transactions returns within the game before people drop out. Thus relatively short term engagement is an in-built expectation of their social games—Zynga do not require, or expect, lengthy user engagement in order to maximise their returns. However, in order to ensure that they maximise LTV, the developers necessarily need to find ways to encourage their users to interact, share and stay interested in returning to and engaging with the site: they need to provide activities, mechanics and opportunities that will be of value to their users.

It is noteworthy that the popularity of particular games can shift rapidly; for example, at the peak of Farmville's popularity in 2010 it had more than 80 million monthly active users (MAU) while that number had dropped by more than half to 30 million MAU by August 2011 (Jacobs and Sihvonen, 2011). However, as most of the Zynga games follow a similar model—Cityville and Farmville, for example, have very similar game mechanics, just in different settings—insights from Farmville gameplay are illustrative of broader trends and issues in the larger realm of social gaming.

From (Lil) Green Patch to Farmville

When Facebook's Application Developer platform was launched in May 2007, developers knew that this represented an unparalleled opportunity to take advantage of the Facebook audience, going beyond 'Poke' style applications. The poke feature or poke gesture ('nudge' in instant messaging) is used to try to attract a response from another user. Facebook users used Poke to attract attention or say 'hello' to their friends. The popularity of poke, for developers, was a clear empirical indication of the interest of friends in connecting with friends in novel and engaging ways. Facebook's FAQ talks about the origin of the feature:

When we created the poke, we thought it would be cool to have a feature without any specific purpose. People interpret the poke in many different ways, and we encourage you to come up with your own meanings.

Facebook extended the idea of the poke to 'kick' or 'wave to' and 'Poke Wars' became popular where friends reciprocate poking back and forth until one side gives up. Poke Wars are forerunners of social games, of course. Mob Wars, role playing in Mafia style wars, were also an early favourite on the Facebook platform.

(Lil) Green Patch

However it was (Lil) Green Patch that was the forerunner of Farmville. Based within Facebook and thereby relying on Facebook user base for its membership, (Lil) Green Patch was intentionally social—the in-game mechanics were such that a player needed to help other players in order to succeed. The aim of the game was to cultivate a patch and to tend the patches of others. People could select items at a store with game cash—or GreenBucks—that they acquired through game activities, such as sending flowers to friends for their patch, sending and receiving text feedback from their friends, and also from the game itself reporting the results of building and cultivating the patch. Regular visits to the site were also required to keep the patch alive and well.

An added incentive for user participation that was layered over the game, was an advertised ability to save sections of rainforests from clearing as a result of participation and invitation to others. Each time a user returned to the game or invited other participants to the game, the site would inform the user that they had saved so many square feet of rainforest as a result of their actions. A proportion of advertising revenue was donated to the conservation group, Nature Conservancy (Whitson and Dormann, 2011).

In 2008, the game had 350,000 Daily Active Users and was listed in the top 15 Facebook Applications (Hamilton, 2008). Fig.1 shows a graphics interface from the game.



Figure 1: (Lil) Green Patch

(Lil) Green Patch was simple and effective but the graphics were primitive and game progression limited. For developers, therefore, better visualisation in the farm genre was an obvious next step. Slashkey's Farm Town provided that visualisation.

Slashkey's Farm Town

Slashkey developed Farm Town in 2009. As was the case in (Lil) Green Patch, you could grow things on your farm by sending and receiving gifts to other friends/farmers, essential if you wanted to maintain your farm. However, unlike in (Lil) Green Patch, the graphics provided full, customisable, animated avatars that could move around the screen. The avatar could physically crop and harvest, as the avatar does in Farmville. The game, as Figure 2 shows, had a 'virtual world' touch. FarmTown was accused of stealing the 'look' from Zynga's YoVille but, not surprisingly, Zynga's Farmville looks not unlike Farm Town in other ways.



Figure 2: Farm Town

Zynga's Farmville

However, Zynga's Farmville went a step further than Farm Town; introducing Farmville Coins and Farmville Cash. These currencies made the game's progression simpler and also added additional dimensions to the game for both user and developer: a sophisticated way of enabling the circulation of virtual and real cash within the farm building experience. Social interaction, of course, remained at the heart of Farmville as it was also in Farm Town. Figure 3 shows the currency bars at the top of the Farmville page.



Figure 3: Farmville Currency

Keep in mind, compared with Slashkey's Farm Town, Zynga already had an existing customer base across its games portfolio and was able to leverage this customer base through advertising.

In 2012, one of the authors, Mark Balnaves took on a participant-observation role in Farmville to experience it as a game and to understand the experiences and motivations of other game players. What follows, is an overview of the 'negotiating entry' into the game and Balnaves's own experiences and motivations as a part of that game.

Building Your Own Farm

'Negotiating entry' into the field is a key part of qualitative fieldwork because it sets the scene for future interactions with participants and also, of course, perceptions of the participants of the participant-observer. The core, established method for recording observations was taken from Schatzman and Strauss (1973). In brief, it involves:

- (i) Observation Notes. Recording observations; taking notes at the time, or audio and visual recordings, or collection of artefacts at the time;
- (ii) Theory Notes. Reflections on the observations and how those observations might relate to explanations of the phenomenon itself or existing theories about the phenomenon or related phenomena;
- (iii) Methodological Notes. Checking on procedure, roles of key informants, ethics and, not least ensuring that there is an external person for oversight (in immersion in traditional societies this assists with perspective, especially if a researcher goes 'native').

The aim of this approach is to enhance researcher self-reflexivity by continuously recording observations and reflecting on them. Online ethnography differs from traditional, face to face, ethnography because informants' identities are not necessarily what they might appear to be or can be altogether fabricated. However, the key ethics and fieldwork procedures remain the same. Online contexts provide a different but substantial source of 'rich, thick' data either through textual or visual interactions (Hine 1998, 2000).

The fieldwork study period in Farmville started in January 2012 (although discussion with colleagues on ethics and how to elicit informed consent occurred much earlier than that). Ethics approval was granted for the study on the basis that informants would be notified about the nature of the study and informed consent conditions were fulfilled if interviews were sought.

Facebook and Facebook friends provided the entry point for players to Farmville. Thus, to become a Farmville player, the researcher had to become a Facebook member as well. This was a little problematic because the researcher had been concerned about Facebook issues and privacy long before he joined Farmville (see Boyd, 2008). Joining Facebook, he decided, was a trade-off just as joining any other social media type activity is a trade-off. Moreover, his profile on the Internet already extended far beyond his own comfort zone, with material that he cannot get taken down because he has no direct ownership of it (Walters, 2009). In this case, the fieldwork study, of course, also came with it the added responsibility of other people who came within the ambit of the ARC study.

The field researcher additionally faced the problem of whether or not to bring in Facebook friends into the game, as part of the study, or to start with people he did not know. There was

extensive discussion among investigators over privacy and the ethics of using (Facebook) friends, real existing friends, as part of the study.

At that time it was assumed that the Farmville rule of Facebook friends as the starting point for gaining neighbours was the only way of building your farm. However, Zynga introduced a new application that allowed farmers to invite random, unknown, people as 'neighbours'. This is in fact the choice that the field researcher made, not so much because of any moral opposition to using Facebook friends, but because he did not have many Facebook friends and those on his Facebook site did not want to play Farmville.

The following section is a brief report on the game play itself, entry to the field, setting up the farm and issues that emerged in the first few months of Farmville play by the fieldwork researcher.

The researcher, The Farmer, spent 3 hours a day, each day, on Farmville. The farmer character is a customisable avatar that can walk around the farm, wear different clothes, become a different gender, and take advantage of a range of other customisable options. In the original game offering, neighbours were selected based on Facebook friends, however the introduced ability to select random potential neighbours, provided by Zynga, was attractive to the researcher, providing a level of anonymity. Unlike Facebook friends, though, there is no direct access to the neighbours' Facebook site, unless permission is sought. For the researcher, this meant posting a message on a wooden post with a note on it on the 'friends' farm, seeking access and another level of friendship. The researcher also posted the fact that he is involved in the study on his site as well as on farm sites. This has not stopped the interaction with the neighbours in terms of exchanging gifts.

A diary entry gives an indication of the researcher's own reactions when 'friends' provided messages back:

I got my first reaction to a posted on to one of my 'friends' farms—one of the wealthier looking ones which must have run for years (or the farmer has a lot of cash indeed). They were very friendly, telling me 'don't forget to send lots of gifts!'. I did, indeed, feel like a friend, even though I did not know who this person was. I was determined, from that moment on, to send gifts and build my friendship. I received many gifts in return.

In Farmville, neighbours can visit each other's farms without any formal interaction and send each other gifts. This is a rather crude but effective mechanism to build a (limited) sense of social connection and also obligation to others. According to Liszkiewicz (2010),

The secret to Farmville's popularity is neither gameplay nor aesthetics. Farmville is popular because it entangles users in a web of social obligations. When users log into Facebook, they are reminded that their neighbors have sent them gifts, posted bonuses on their walls, and helped with each others' farms. In turn, they are obligated to return the courtesies. As the French sociologist Marcel Mauss tells us, gifts are never free: they bind the giver and receiver in a loop of reciprocity. It is rude to refuse a gift, and ruder still to not return the kindness. We play Farmville, then, because we are trying to be good to one another. We play Farmville because we are polite, cultivated people.

There is a growing body of literature that explores the gift within online environments and social network services (SNS) (Bruns, 2010; Castronova et al., 2009). Likewise there is a considerable body of work that explores the value-adding nature of online communities for commercial entities (Bruns, 2008; Garcelon, 2009). In Farmville, gift exchange and commerce intersect in ways that both foster some level of connection and community amongst users while also providing revenue, and social graph and user information to both Zynga and Facebook.

For the researcher, the ethnographer, the continuous planting and harvesting of crops to gain coins soon became a routine. He saw it as an economy of sorts, enabling him to purchase items in the market to enhance the harvesting of crops. Each item bought in the market, such as seeds for tomatoes, has a different amount of time for that item to mature as a crop. The longer the maturation time, the greater the reward. Strategy is necessary to maximise outcomes.

The researcher was, initially, impatient and started growing crops that had a quick turnaround, say 2 hours. This soon changed when he understood the strategy better. However, the one crop he elected for a longer time period 'withered', giving him no reward at all. Crops which take 8 hours to grow will wither after $2.5 \times 8 = 20$ hours. In such a situation, the farmer can also use farm cash to purchase an 'unwither' to renew the crops or he can use a biplane with 'instant grow' to enable crops to be immediately available for harvest.

The researcher ensured that crops did not die. He set his mobile phone to ring an alarm when crops were due to be harvested. He could not rely on memory. The farm requires constant maintenance or plants will wither and die. This compelled in the researcher a certain feeling of commitment and responsibility that required continual return to the game. Like virtual pets and a range of games before them, Zynga's core games reward constant use and attention (a player accumulates cash, their farms prosper, the reputation and social connections build), but also punish inattention to the game (Begy and Consalvo, 2011).

A diary entry on this obligation provides some insight into this process:

I played with a virtual pet when I was younger and this feels exactly the same – the farm has to live. The additional commitment to other people's farms, though, makes it a much more emotional bond.

Coins and cash along with acts of social capital (neighbourly work and gift exchange), provide the main mechanism for in-game activity, social engagement and the cross-over of virtual and real currency exchange. Farmville, and all of the core Zynga social games, use a freemium model where it is free to enter and play the game, but paid features are available, including virtual goods, which can further players' experience and progress in the game, as well as enable them to escape the negative impact, such as crops dying, that can occur if players do not log in every day (Begy and Consalvo, 2011). For example, the researcher could not miss the continuous pop-ups providing options to buy real cash, a core feature of the game from the beginning. Farmers get income by tending to their own farm, harvesting crops, and for neighbourly work. Income is also gained through ribbons, awarded to the farmer as the game progresses and levels are achieved. A farmer earns 1 farm cash when they reach a new level. The farmer earns experience points (XP) at selected benchmarks and the farmer's level rises.

The more money the farmer has, the more that they can buy from the 'market' where items can be purchased using either farm coins or farm cash. Money is used for buying seeds, trees and animals, decorations, buildings and a massive range of other items in order to build the farm. The

quickest way to do anything you like, not surprisingly, therefore is to buy cash from Zynga. This is enabled through the use of Facebook Credits, a virtual currency mechanism linked to real cash and a service offered by Facebook to its game developers in return for a 30 percent cut of any cash flow going back to Facebook. As noted earlier, Zynga games, of which Farmville is one of the more successful offerings, and their in-games sales of virtual goods and advertising accounted for 12 percent of Facebook's income in 2011).

The researcher was determined to gain the ribbons. Each ribbon has a defined amount of difficulty to it, but this researcher was unable to work out what that was, only that the ribbon appeared and he consequently went up a 'level'. He was proud of the event, though, and said this on his Facebook site, which was then shared with his real friends.

There are four colours of ribbon for each reward yellow, white, red and blue. The researcher worked through Local Celebrity by adding more neighbors; Good Samaritan by helping friends; High Roller by earning coins; and A Pretty Penny by spending coins at the market. He still has many ribbons to go:

- Cream of the Crop by harvesting crops;
- Knock on Wood by harvesting trees;
- Zoologist by collecting from animals;
- Architect by building buildings on the farm;
- Pack Rat by adding decorations to the farm;
- Animal Shelter by giving shelter to stray animals;
- Green Thumb by harvesting unique crops;
- Tree Hugger by harvesting unique trees;
- Noah's Ark by collecting from unique animals;
- Not Spoiled, Gifted! Achieved by receiving unique gifts;
- Crop Whisperer Achieved by fertilising neighbours' crops.

FarmVille says that some ribbons are easier to get than others:

Pack Rat Ribbon: Buy hay bales until you get the blue ribbon. The money you get as rewards adds up to more than the cost of the hay bales. Then sell them all to get more coins.

Architect Ribbon: Buy rest tents until you get the blue ribbon. Same reward as for Pack Rat. Also sell them to get more coins.

Not gifted, spoiled Ribbon: You need 21 unique gifts to get blue ribbon. Just never use your unique gifts until you get the blue ribbon. Keep one of each gift only, because you can't have more than 30 gifts total in your gift box. So if you get 2 horses, keep just one in gift box and put other on your farm.

Local Celebrity Ribbon and Shutterbug Ribbon: Mass add neighbors (that will eventually get you Local Celebrity Ribbon). Go to every farm you add and take a pic of it (for Shutterbug ribbon). Mass numbers of neighbors also get you many ribbon bonuses in your news/farmville feed.

As can be seen, the researcher read all the Farmville FAQ in place of buying a strategy book. 'Knowing the mechanics of the game', he wrote in his diary, is essential.

Discussion

As the brief ethnographic account has noted, feelings of obligation to others in the form of neighbours (who the researcher doesn't yet 'know') and to the game in terms of the maintenance, even enhancement, of the farm, are experienced. This sense of obligation could arguably have been felt even more strongly if the neighbours had been drawn from the researcher's own social graph. In this sense, the potential for social games to generate a limited 'third space' of socialisation that gives a 'feeling of community and participation without actual co-presence or interaction' (Rao cited in Whitson and Dormann, 2011) can be suggested. Satisfaction and a sense of accomplishment are also noted when ribbons are achieved, crops are successful and when neighbourly gifts are effectively exchanged. However, it must also be acknowledged that neighbours were approached as a resource both in terms of enabling progression through the game and also in the interests of obtaining data for this research project.

Thus, it can be seen that the value of social gaming participation is complex. There is clearly a commercial return available for the developers and also for the social networking services (most commonly Facebook) through which the game is accessed. The developer garners revenue from in-game micro-transactions and advertising, and also gathers information about player practices, desires and frustrations which assist with refining the game mechanisms further. They also gain access to demographic information, social graph information, profiles and so on. Facebook not only gains revenue and personal and social information, they also value-add for many of the users of their service in terms of added interest in maintaining activity on the site, thus enhancing activity, stickiness, and relatedly, an ability to attract more advertising dollars, more game developers, and more users.

However, the user is not simply exploited and drained of money and data. As is clearly evident from the initial ethnographic experiences, the existing academic literature, and the numerous discussion boards, people enjoy Farmville and social gaming generally, experiencing a sense of social connection, escapism and also competition that is not so easily encapsulated within the game activities alone. Instead, partly because they do draw on existing social networks and mostly 'real' friends, social games offer another layer to a range of social interaction mechanisms that can be fit around our changing lifestyles and practices. Farmville experiences, community and commerce extend beyond the service's official boundaries or parameters as is evidenced by the proliferation of a spate of tips, cheats and discussion sites across the internet. A quick Google search for 'hay bales and ribbons', for example, returns multiple pages of Farmville tips and cheat sites, and a Facebook group for extreme Farmville users. While game developers often focus on players in terms of economic value, for the players of Farmville themselves, the value of their gameplay has wider meanings. This requires recognition but also would benefit from broader analysis and discussion.

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